DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT AGENCY
EUROPE REGION
UNIT 29353, BOX 200
APO AE 09014

IMEU-PWD-O

FEB 0 3 2006

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: IMA-EURO Energy Guidance

1. Enclosed are the DA energy conservation interim policy (enclosure 1) and IMA-EURO energy guidance (enclosure 2) for immediate implementation to meet or exceed the Energy Policy Act 2005 goals. Interim policy guidance may be adjusted to meet Host Nation regulations pertaining to Labor work space.

2. DA and IMA-EURO guidance support the Energy Policy Act of 2005, signed into law on 8 August 2005, and the recent Presidential memorandum on Energy and fuel Conservation by Federal Agencies. In addition, conservation measures outlined in these guidance will help the Garrisons achieve the five goals of the Army Energy Strategy recently signed by the Secretary of the Army and the Army Chief of Staff.

3. IMA-EURO Garrisons will implement this guidance immediately to reduce energy consumption in the face of an energy crises compounded by increasing demand, dwindling energy reserve, and rising costs. Although, IMA-EURO FY05 energy consumption has increased by 1.2% compared to FY04 and decreased by 1.2% from FY03, IMA-EURO FY05 energy cost has increased by $18M (+11%) compared to FY04 and by $38M (+24%) compared to FY03.

4. The increased OPTEMPO caused by the Global War on Terrorism and recent natural disasters makes this responsibility an ever increasing challenge. Despite these operational demands, IMA-EURO must still execute its responsibility to be a good steward of our limited resources. IMA-EURO will continue to strive to modernize infrastructure, increase utility and energy conservation and demand reduction, and improve energy flexibility and security.

4. IMA Europe Region, Engineer Division, point of contact is Mr. David Yacoub, DSN 370-6845, email David.Yacoub@ima-e.army.mil.

2 Encls

RUSSELL B. HALL
Director

DISTRIBUTION:
Commander,
USAG Stuttgart, ATTN: IMEU-STU-ZA, Unit 30401, APO AE 09107
USAG Vicenza, ATTN: IMEU-VIC-ZA, Unit 31401, Box 80, APO AE 09630
USAG Heidelberg, ATTN: IMEU-HEI-ZA, Unit 29237, APO AE 09102-9237
(CONT)

DISTRIBUTION: (CONT)
USAG Benelux, ATTN: IMEU-CHV-ZA, CMR 451, APO AE 09708
USAG Franconia, ATTN: IMEU-WUZ-ZA, Unit 26622, APO AE 09244
USAG Grafenwoehr, ATTN: IMEU-GFW-ZA, Unit 28130, APO AE 09114
USAG Hessen, ATTN: IMEU-HAN-ZA, CMR 470, APO AE 09165

CF:
USAG Wiesbaden, ATTN: IMEU-WSB-ZA, Unit 29623, APO AE 09096
USAG Baumholder, ATTN: IMEU-BMH-ZA, Unit 23746, APO AE 09034
USAG Darmstadt, ATTN: IMEU-DAR-ZA, CMR 431, APO AE 09175
USAG Ansbach, ATTN: IMEU-ANS-ZA, Unit 28614, APO AE 09177
USAG Schinnen, ATTN: IMEU-SCH-ZA, Unit 21602, APO AE 09703
USAG Bamberg, ATTN: IMEU-BAM-ZA, Unit 27535, APO AE 09139
USAG Schweinfurt, ATTN: IMEU-SWF-ZA, CMR 457, APO AE 09033
USAG Hohenfels, ATTN: IMEU-HHF-ZA, Unit 28216, APO AE 09173
USAG Giessen, ATTN: IMEU-GSS-ZA, Unit 20911, APO AE 09169
USAG Mannheim, ATTN: IMEU-MAN-ZA, Unit 29901, APO AE 09086
USAG Kaiserlautern, ATTN: IMEU-KAI-ZA, Unit 23152, APO AE 09227
USAG Garmisch, ATTN: IMEU-GAR- ZA, Unit 24515, APO AE 09053
USAG Livorno, ATTN: IMEU-LIV-ZA, Unit 31301, Box 56, APO AE 09613

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
INSTALLATIONS AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON DC 20310-0110

27 DEC 2005

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Interim Policy Guidance – Army Energy Conservation

The enclosed energy conservation measures are forwarded for immediate implementation.

These energy conservation actions support the Energy Policy Act of 2005, signed into law on August 8, 2005, and the recent Presidential memorandum on Energy and Fuel Conservation by Federal Agencies. In addition, these conservation measures will help the Army achieve the five goals of the Army Energy Strategy recently signed by the Secretary of the Army and Army Chief of Staff.

The Army is implementing this policy immediately to reduce energy consumption in the face of an energy crisis compounded by increasing demand, dwindling energy reserves, and rising costs. The increased OPTEMPO caused by the Global War on Terrorism and recent natural disasters makes this responsibility an ever increasing challenge. Despite these operational demands, the Army must still execute its responsibility to be a good steward of our limited energy resources.

Joseph W. Whitaker
Deputy Assistant Secretary of the Army
(Installations and Housing)
OASA(I&E)

Enclosure

DASA-I&H
SUBJECT: Interim Policy Guidance – Army Energy Conservation

DISTRIBUTION:
ASSISTANT SECRETARY OF THE ARMY (ACQUISITION, LOGISTICS AND TECHNOLOGY)
ASSISTANT SECRETARY OF THE ARMY (FINANCIAL MANAGEMENT AND COMPTROLLER)
ASSISTANT SECRETARY OF THE ARMY (MANPOWER AND RESERVE AFFAIRS)
ADMINISTRATIVE ASSISTANT TO THE SECRETARY OF THE ARMY
THE INSPECTOR GENERAL
CHIEF OF PUBLIC AFFAIRS
DEPUTY CHIEF OF STAFF, G-3/5/7
DEPUTY CHIEF OF STAFF, G-4
DEPUTY CHIEF OF STAFF, G-6/CIO
DEPUTY CHIEF OF STAFF, G-8
CHIEF, ARMY RESERVE
CHIEF, NATIONAL GUARD BUREAU
THE SURGEON GENERAL
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
SERGEANT MAJOR OF THE ARMY

COMMANDERS:
US FORCES KOREA & EIGHTH US ARMY, ARCS
US ARMY EUROPE AND 7TH ARMY, AEAGX
US ARMY TRAINING AND DOCTRINE COMMAND, ATCS
US ARMY MATERIEL COMMAND, AMCCS
US ARMY PACIFIC, APCS
US ARMY MEDICAL COMMAND, MCZX
US ARMY MILITARY DISTRICT OF WASHINGTON, ANCS
US ARMY SOUTH, SOCS
US ARMY CRIMINAL INVESTIGATION COMMAND, CIPL
US ARMY INTELLIGENCE AND SECURITY COMMAND, IASC
US ARMY SPECIAL OPERATIONS COMMAND, AOCS
US ARMY CORPS OF ENGINEERS, CECS
US ARMY SPACE AND STRATEGIC DEFENSE COMMAND, SMDC
SURFACE DEPOLYMENT AND DISTRIBUTION COMMAND, SDTE

SUPERINTENDENT, US MILITARY ACADEMY, MACS

Interim Policy Guidance
Army Energy Conservation

A. Computer use.

- General purpose office equipment, copiers, printing devices, faxes, all-in-one devices, and similar equipment will be turned off at the end of every business day. Computer monitors and peripheral devices such as speakers, scanners, and external drives, shall be turned off when not in use. Consideration should be given to using a power strip for all external devices to ease and consolidate turning off the devices and the associated transformers that are required for these devices.

- Computer and peripheral devices used in conference rooms, video-teleconferencing, and kiosks environments shall be turned off when not in use. Computer and peripheral devices shall be turned off when not in use for extended periods of absence such as vacation or holidays.

- Computers, desk top units, and personal computers can remain on for IT purposes only when the computer is capable of; configured, and enabled for energy saving features such as standby or low energy usage modes during periods of operator absence and the mode is activated after any 30 minutes of inactivity.

- Use of this exception to remain on by use of standby or low energy modes of operation are authorized only when the computer meets ENERGY STAR™ compliance and consumes 20 watts or less of energy while in that mode. Servers, storage area network devices and other network infrastructure are NOT required to be powered off during periods of non-use.

- AR 25-1, para 6-2.f. requires that all purchases of microcomputers, including personal computers, monitors, and printers, meet the ENERGY STAR™ requirements for energy efficiency.

- An exception to leaving non-compliant CPUs on for short periods of after-duty-hours is authorized by Information Technology (IT) authority when a specific start and stop date and applicable times for the CPUs to remain on is stated. The specific impacted computers will be listed with the start/stop date announcement. Start/Stop dates and announcements, intended to defeat the intent of turning off the non-compliant CPUs when not in use, is prohibited.

B. Electrical Use.

- The lighting fixture standard for new construction, remodeling, and modular office furniture is the T-8 lamp with instant start electronic ballast or the T-5 lamp. Day-lighting and occupancy controls will be used when determined to be cost-effective. Illuminating Engineering Society of North America (IESNA) standards of lighting will be used as a standard for all Army garrisons and facilities occupied by reimbursable tenants.

- Off-hour and exterior lighting will be eliminated, except when it is essential for safety and security purposes as required by AR 190-11. If lighting is required, use of motion sensor controls will be evaluated for cost effectiveness.

- Ensure electrical equipment and appliances (e.g. monitors, fans, coffee pots) are turned off when not being used and during non-duty hours.

- Refrigerators. Refrigerators are authorized in work and office areas for area use with sizing based on number of personal supported. Use one (1) cubic foot per person as an average to determine size and quantity of refrigerators that are appropriate. Refrigerators in work areas and offices intended for only one person's use are prohibited. Exceptions allowed for General Officers and Commanders who have conference room meeting requirements that justify the single use.

- The Director, IMA may authorize garrison commanders to set local policy on the use of outdoor decorative holiday lighting, giving consideration to the use of timers or photo sensors for usage control.

C. Heating and Cooling.

- During the heating season, temperatures in occupied general office space will be maintained in the range of 72 degrees Fahrenheit (°F) plus or minus 2°F during working hours. Heating setback temperatures during unoccupied times shall be set at 55°F plus or minus 5°F.

- Temperatures in warehouses and similar active working spaces will be at 60°F plus or minus 5°F during occupancy and 45°F plus or minus 5°F during unoccupied periods. Warehouses will not be heated if they are usually devoid of human activity and if freezing and condensation are not issues.

- Wherever mechanical cooling is authorized, cooling season temperatures for occupied working and living spaces shall be maintained in the range 74 °F plus or minus 2°F. Cooling set-up temperatures during unoccupied times shall be set at 85°F plus or minus 5°F. Space temperature for medical and medical research operations will comply with these standards except where the mission or DOD standards require otherwise.

- The operation of portable heating and cooling devices is prohibited where the intent is to circumvent the heating and cooling standards outlined above. Supplemental heating and cooling may be used when cost effective energy reductions can be achieved by reducing usage of primary heating and cooling systems or personal comfort levels can not be achieved by reasonable adjustments of the primary system. Such devices are particularly effective where only a few people occupy a portion of a large building, and conditioning is only required in a small section of the facility.

- Use of personal supplemental heating or mechanical cooling devices must have supervisor written approval and must only be used when the area is occupied.

D. Vehicles. The administrative use of vehicles, aircraft, and other energy-consuming equipment will be monitored for abuse and unnecessary use beyond that needed to maintain readiness. Engines will be turned off when vehicles are parked unless maintenance operations require the engine to be running.

E. Procurement. All purchased appliances and heating, ventilation and air conditioning (HVAC) equipment will be ENERGY STAR™ rated for any new or replacement application.

DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT AGENCY
EUROPE REGION
UNIT 29353, BOX 200
APO AE 09014

REPLY TO
ATTENTION OF

IMEU-PWD-O

FEB 0 3 2006

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: IMA-EURO Region Energy Management Guidance

1. Purpose: Provide guidance and prescribe procedures for IMA-EURO Region Garrison Commanders on energy and water management.

2. Applicability: Pertains to all phases of administration, planning, programming, budgeting, operations, maintenance, training, and material acquisition activities that affect the supply, reliability, and consumption of facilities energy and water.

3. Background: Energy and water management is both mandated and critical to the Army's success. The Energy Policy Act 2005, AR 11-27 (Army Energy Program), and Executive Order 13123 (Greening the Government through efficient energy management), establish requirements to create and execute an energy program that ensures energy availability, conservation, and promotes new technology. These objectives must be accomplished without degrading readiness, the environment, or quality of life. The Army Energy Program is decentralized with ACSIM issuing policy, and HQ IMA and the individual IMA Regions developing amplifying guidance, coordinating regional initiatives, and providing tools for Garrison use. Garrisons are responsible for implementing the policies and guidance issued by ACSIM, IMA, and the IMA-EURO and to plan and execute their own site-specific energy and water conservation programs.

4. Policy: A successful energy management program mandates a commitment by the Garrison Commander (GC), functional managers, and employees to support and aggressively pursue buy-in to Army energy goals and objectives: 1) Reduce Greenhouse Gas emissions; 2) Reduce Energy and Water Consumption; 3) Expand Renewable Energy Procurements; 4) Reduce the use of Petroleum Products; and 5) Decrease Source Energy Use. Confidence in, and support of these goals and objectives begins with this commitment, and is given credibility with a trained, knowledgeable, and professional Energy Team. The Energy Manager's success in achieving established energy management goals, and being innovative in achieving those goals, is directly related to support received from the GC, and functional managers:

a. Reduce Greenhouse Gases: Through life-cycle cost effective measures, Garrisons shall reduce greenhouse gas emissions attributed to facility energy use by 30% by 2010, using 1990 as the base-year.

b. Reduce Energy and Water Consumption: Garrisons will reduce energy consumption per gross square foot in facilities, and implement Water Management Plans in accordance with Best Management Practices:

(1) All facilities: Reduce consumption by 2% per year relative to 2003 as a baseline. (Energy Policy Act of 2005 Sec. 102).

(2) Facility Energy Audits: Conduct energy and water audits at 10% of facilities each year. (Energy Policy Act of 2005 Sec. 402).

(3) Incorporate Water Management Plans with Best Management Practices outlined in the Garrison Water Management Plan on 30% of facilities by 2006, 50% by 2008, and 80% by 2010. (Energy Policy Act of 2005 Sec. 207).

c. Renewable Energy Procurement: Procure, or produce, renewable energy, when life-cycle cost effective, such that it accounts for 3% of total electrical demand in FY 2007-2009; 5% in FY 2010-2012; and 7.5% in 2013 and thereafter (Energy Policy Act 2005 Sec. 203). IMA-EURO Garrisons are encouraged to aggressively pursue a long-range goal of 25% by 2025.

d. Petroleum Use: Through life-cycle cost effective measures, Garrisons will reduce the use of petroleum by switching to a less greenhouse intensive, non-petroleum energy source, such as natural gas or renewable energy sources; by eliminating unnecessary fuel use; or by other appropriate methods (Executive Order 13123 Sec. 205).

e. Source Energy: Garrisons will strive to reduce total energy use and associated greenhouse gas and other emissions, as measured at the source. To that end, Garrisons will undertake life-cycle cost-effective projects in which source energy decreases, even if site energy use increases (EO 13123 Sec. 206).

5. Actions: As a minimum, Garrisons will focus attention on the following areas of emphasis to assist in meeting the Army energy reduction goal of 2% per year from base year FY03 through FY15:

a. Energy Planning Team (EPT): Establish and maintain an Energy Planning Team. This group will be chaired by the Energy Manager, and be composed of Garrison personnel nominated and selected from each functional area. The EPT will recommend and guide plans and projects to achieve the energy management/conservation goals for the installation. The EPT will report their activities to the Garrison Planning Board (GPB) which is chaired by the Garrison Commander, or other designated manager. The GPB will periodically review the activities of the EPT and Energy Manager to determine the direction and effectiveness of energy conservation measures. They will also review and approve priorities to be placed on Energy Conservation Investment Program (ECIP), Energy Savings Performance Contracting (ESPC) and other energy reducing programs.

b. Energy Manager: Designate a full time energy and water manager who is trained IAW current laws and Executive Orders to head the EPT and represent the Garrison in all energy

and water matters and act as the POC for IMA-EURO Region. This POC will coordinate facilities and R&D energy matters for the command. POC contact information will be provided to the Regional Energy manager upon receiving this guidance and within 15 working days following a change. Include energy and water management responsibilities in position descriptions of facility managers, designers, energy managers, their superiors, and, to the extent practical and appropriate, others critical to the implementation of applicable laws and Executive Orders. Include successful implementation of energy efficiency, water conservation, and renewable energy projects in performance evaluations.

c. Building Monitor program (BEM): Establish an effective Building Monitor program. This program can be highly effective in assisting your energy manager in identifying and programming energy projects. The Energy Manager will oversee this program, and create/implement operating instructions. BEM training will be in accordance with the Department of the Army Building Energy Monitor's Handbook.

d. Army Energy and Water Reporting System (AEWRS): Establish and maintain quality controls to ensure energy and water data is accurately entered into AEWRS on a quarterly basis. Establish a system, which ensures Real Property Inventory data, required for the Annual Factors Report, is accurate and available for input as needed. Identify and report exempt facilities for AEWRS reporting.

e. Alternate Financing: Partnership with private sector through alternate financing is a critical tool for financing energy efficiency measures and allowing Garrisons to improve their infrastructures. These contracts shall include infrastructure upgrades (e.g, new cogeneration and renewable systems) and new equipment (e.g, HVAC, motors, fixtures and controls). Annually develop at least one alternative financing project, using Energy Savings Performance Contracts (ESPC). Document these efforts in the Annual Energy Report. Documenting this activity is important so that your installation can receive credit for ESPC activities.

f. Energy Conservation Investment Program (ECIP). Develop and submit at least one project nomination, annually, with complete DD Form 1391, to include economic analysis. Concentrate on renewable energy (wind, solar, geothermal, etc) and co-generation plants.

g. Training: Ensure energy personnel attend professional development training, including earning Certified Energy Manager (CEM) designation. Garrisons are encouraged to plan for energy personnel or managers to attend the annual Worldwide Army Energy Conference. Establish and maintain regular energy conservation training classes for all Garrison personnel. This will include the training of Building Monitors.

h. Energy Awareness and Conservation Assessment (EACA): Nominate for EACA once every four years. If and when selected, ensure success by coordinating seminars, ensuring Garrison personnel attend, and implementing study team recommendations. EACA nominations are due each March.

i. Project review: Review all repair and construction project plans and specifications for compliance with energy conservation goals and objectives. Strive to obtain U.S. Green Building

Council's Leadership in Energy and Environmental Design (LEED), or a SPiRiT "Gold" rating or Energy Star facility label or equivalent host nation ratings for all projects.

j. Annual Energy Report. Ensure that all data is available for submission when requested by the IMA-EURO energy manager. Garrison submissions usually occur mid to late October. This process is made easier if the AEWRS data is maintained as outlined in para 5e.

k. Awards: Garrisons are encouraged to participate in the Secretary of the Army Energy Management Award, DOE Federal Energy and Water Management Award, and the President's Leadership in Federal Energy Management Programs. These award programs recognize individuals, organizations, and small groups for outstanding achievements in several energy related categories. Garrisons are also encouraged to establish and maintain individual awards programs, and incorporate on-the-spot awards and incentive awards to recognize exceptional performance and participation in the energy management program.

l. Water Management Plan (WMP): Develop, implement, and maintain WMP. Provide a copy of the completed plan to IMA-EURO Region energy manager.

o. Garrison Energy Management Plan (EMP): Develop and maintain EMP. This plan will be the road map to achieving your immediate and long-term energy efficiency goals and objectives. A template can be obtained from IMA-EURO region energy manager.

p. Audits: Conduct random annual energy audits of at least 10% of energy consuming facilities. It is understood that this effort may be cost prohibitive, you are therefore encouraged to use alternative-financing tools, i.e., ESPC contracts to conduct energy audits.

q. Energy Security: Develop and maintain a comprehensive Utility/Energy Systems Security Plan. Provide a copy of the completed plan to IMA-EURO Region energy manager. Garrisons shall take steps to ensure the security of energy and water resources. Garrison shall perform periodic evaluation of the vulnerability of basic mission requirements to energy disruption and assess the risk of such disruption, implement remedial actions to remove unacceptable energy security risks and investigate off-base utility distribution and energy supply systems.

r. The previous areas of interest are not all inclusive. Garrison energy program must be flexible enough to accommodate these requirements, and remain capable of accepting and incorporating new ideas and policies. This flexibility is the key to IMA-EURO Garrisons contributing to the Army mandated goals

s. Distributed Energy Generation: Distributed energy resources shall be used for on-site generation using micro-turbines, fuel cells, combined heat and power, renewable technologies when determined to be life-cycle cost effective considering future and rising cost of conventional fuel sources or to provide flexibility and security to mitigate unacceptable risk. In most cases, larger scale, off grid generation, owned and operated by Garrisons may make sense for mission criticality and remote sites. In these cases, innovative energy generation technologies such as solar lighting, large photovoltaic arrays, wind turbine generators, micro-turbines and fuel cell demonstration projects shall be utilized.

6. IMA-EURO Region strives to conduct annual energy training for Garrison energy managers and Garrison staff. The training provides tools necessary to develop and maintain an energy program capable of meeting and sustaining Army standards for energy efficiency.

7. The IMA-EURO Region Energy manager is Mr. David Yacoub, at 370-6845, e-mail: David.Yacoub@ima-e.army.mil.

RUSSELL B. HALL
Director

DISTRIBUTION:
Commander,
USAG Stuttgart, ATTN: IMEU-STU-ZA, Unit 30401, APO AE 09107
USAG Vicenza, ATTN: IMEU-VIC-ZA, Unit 31401, Box 80, APO AE 09630
USAG Heidelberg, ATTN: IMEU-HEI-ZA, Unit 29237, APO AE 09102-9237
USAG Benelux, ATTN: IMEU-CHV-ZA, CMR 451, APO AE 09708
USAG Franconia, ATTN: IMEU-WUZ-ZA, Unit 26622, APO AE 09244
USAG Grafenwoehr, ATTN: IMEU-GFW-ZA, Unit 28130, APO AE 09114
USAG Hessen, ATTN: IMEU-HAN-ZA, CMR 470, APO AE 09165

CF:
USAG Wiesbaden, ATTN: IMEU-WSB-ZA, Unit 29623, APO AE 09096
USAG Baumholder, ATTN: IMEU-BMH-ZA, Unit 23746, APO AE 09034
USAG Darmstadt, ATTN: IMEU-DAR-ZA, CMR 431, APO AE 09175
USAG Ansbach, ATTN: IMEU-ANS-ZA, Unit 28614, APO AE 09177
USAG Schinnen, ATTN: IMEU-SCH-ZA, Unit 21602, APO AE 09703
USAG Bamberg, ATTN: IMEU-BAM-ZA, Unit 27535, APO AE 09139
USAG Schweinfurt, ATTN: IMEU-SWF-ZA, CMR 457, APO AE 09033
USAG Hohenfels, ATTN: IMEU-HHF-ZA, Unit 28216, APO AE 09173
USAG Giessen, ATTN: IMEU-GSS-ZA, Unit 20911, APO AE 09169
USAG Mannheim, ATTN: IMEU-MAN-ZA, Unit 29901, APO AE 09086
USAG Kaiserlautern, ATTN: IMEU-KAI-ZA, Unit 23152, APO AE 09227
USAG Garmisch, ATTN: IMEU-GAR- ZA, Unit 24515, APO AE 09053
USAG Livorno, ATTN: IMEU-LIV-ZA, Unit 31301, Box 56, APO AE 09613